Texas Medicaid/CHIP Vendor Drug Program
Drug Utilization Criteria For Outpatient Use Guidelines
Attention Deficit Disorder (ADD)/ Attention Deficit Hyperactivity Disorder (ADHD) Medications

About
Information on indications for use or diagnosis is assumed to be unavailable. All criteria may be applied retrospectively; prospective application is indicated with an asterisk [*]. The information contained is for the convenience of the public. The Texas Health and Human Services Commission is not responsible for any errors in transmission or any errors or omissions in the document.

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1. Dosage [*]
Adults
The maximum adult recommended doses for available psychostimulants used in ADD/ADHD management are summarized in Table 1.

Table 1: Maximum Recommended Adult Dosages for ADHD Medication

Drug Name	Dosage Form/Strength	Maximum Daily Dose
STIMULANTS		
*Amphetamine salts (mixed)**		
Adderall®, generic	***tablet:*** **5 mg, 7.5 mg, 10 mg, 12.5 mg, 15 mg, 20 mg, 30 mg**	40 mg
Adderall XR®, generic	***extended-release (ER) capsule:*** **5 mg, 10 mg, 15 mg, 20 mg, 25 mg, 30 mg**	20 mg
Dexmethylphenidate		
Focalin®, generic	***tablets:*** **2.5 mg, 5 mg, 10 mg**	20 mg
Focalin® XR, **generic**	***ER tablets:*** **5mg, 10 mg, 15 mg, 20 mg, 25 mg, 30 mg, 35 mg, 40 mg**	40 mg
Lisdexamfetamine		
Vyvanse®	***capsules:*** **10 mg, 20 mg, 30 mg. 40 mg, 50 mg, 60 mg, 70 mg**	70 mg
Methylphenidate		
Immediate-Release: Methylin®, **generic** Methylin®, generic Ritalin®, generic	***chewable tablet:*** **2.5 mg, 5 mg, 10 mg** ***solution:*** **5 mg/5 mL (500 mL); 10 mg/5 mL (500 mL)** ***tablet:*** **5 mg, 10 mg, 20 mg**	60 mg/day
Extended-release: Concerta®, generic	***ER tablet:*** **18 mg, 27 mg, 36 mg, 54 mg**	72 mg/day
Aptensio XR®	***ER capsule:*** **10 mg, 15 mg, 20 mg, 30 mg, 40 mg, 50 mg, 60 mg**	60 mg/day
Metadate® CD, generic	***ER capsule:*** **10 mg, 20 mg, 30 mg, 40 mg, 50 mg, 60 mg**	
Metadate® ER, generic	***ER tablet:*** **10 mg (generic only), 20 mg**	
Quillivant XR®	***ER suspension:*** **300 mg/60 ml, 600 mg/120 ml, 750 mg/150 ml, 900 mg/180 ml**	
QuilliChew ER™	***ER chewable tablet:*** **20 mg, 30 mg, 40 mg**	
Ritalin® LA, generic	***ER capsule:*** **10 mg, 20 mg, 30 mg, 40 mg**	
generic	***sustained-release tablet:*** **20 mg**	

Table 1: Maximum Recommended Adult Dosages for ADHD Medication (continued)		
Drug Name	**Dosage Form/Strength**	**Maximum Daily Dose**
NON-STIMULANTS		
SELECTIVE NOREPINEPHRINE REUPTAKE INHIBITORS		
Atomoxetine		
Strattera®	***capsules:*** **10 mg, 18 mg, 25 mg, 40 mg, 60 mg, 80 mg, 100 mg**	100 mg

ER = extended-release
** Mixed amphetamine salts are a 1:1:1:1 combination of dextroamphetamine sulfate, dextroamphetamine saccharate, amphetamine aspartate monohydrate and amphetamine sulfate*

Pediatrics
Many ADHD medications are FDA-approved for use in pediatric patients. Table 2 summarizes pediatric ADD/ADHD recommended daily doses based upon patient-specific characteristics including age and weight.

Table 2: Pediatric (Child and Adolescent) Dosages for ADHD Medications		
Drug Name	**Dosage Form/ Strength, Age**	**Maximum Daily Dose**
STIMULANTS		
Amphetamine		
Evekeo®	***tablet:* 5 mg, 10 mg** ▪ **3 -17 years of age**	40 mg/day
Amphetamine salts (mixed)[*]		
Adderall®, generic	***tablet:* 5 mg, 7.5 mg, 10 mg, 12.5 mg, 15 mg, 20 mg, 30 mg** ▪ **3 -17 years of age**	40 mg/day
Adderall XR®, generic	***ER capsule:* 5 mg, 10 mg, 15 mg, 20 mg, 25 mg, 30 mg** ▪ **6-12 years of age** ▪ **13-17 years of age**	30 mg/day 20 mg/day
Dexmethylphenidate		
Focalin®, generic	***tablets:* 2.5 mg, 5 mg, 10 mg** ▪ **6-17 years of age**	20 mg/day
Focalin® XR, generic	***ER capsules:* 5mg, 10 mg, 15 mg, 20 mg, 25 mg, 30 mg, 35 mg, 40 mg** ▪ **6-17 years of age**	30 mg/day
Dextroamphetamine		
Dexedrine®, generic	***tablets:* 5 mg, 10 mg** ***Zenzedi® capsules:* 2.5 mg, 5 mg, 7,.5 mg, 10 mg, 15 mg, 20 mg, 30 mg;** ***ProCentra® oral solution:* 5 mg/5 ml** ▪ **3-17 years of age**	40 mg/day
Dexedrine® Spansules, generic	***ER capsules:* 5 mg, 10 mg, 15 mg** ▪ **6-17 years of age**	40 mg/day[+]
Lisdexamfetamine		
Vyvanse®	***capsules:* 10 mg, 20 mg, 30 mg. 40 mg, 50 mg, 60 mg, 70 mg** ▪ **6-17 years of age**	70 mg/day
Methamphetamine		
Desoxyn®, generic	***tablet:* 5 mg** ▪ **6-17 years of age**	25 mg/day
Methylphenidate		
Immediate-release Methylin®, generic Methylin®, generic Ritalin®, generic	***chewable tablet:* 2.5 mg, 5 mg, 10 mg** ***solution:* 5 mg/5 mL (500 mL); 10 mg/5 mL (500 mL)** ***tablet:* 5 mg, 10 mg, 20 mg** ▪ **6-17 years of age**	60 mg/day
Extended-release : Concerta®, generic	***ER tablet:* 18 mg, 27 mg, 36 mg, 54 mg** ▪ **6-12 years** ▪ **13-17 years**	54 mg/day 72 mg/day (max: 2 mg/kg/day)

Table 2: Pediatric (Child and Adolescent) Dosages for ADHD Medications (continued)		
Drug Name	**Dosage Form/Strength, Age**	**Maximum Daily Dose**
STIMULANTS (continued)		
Methylphenidate (continued)		
Extended-release (continued) **Aptensio XR®** Metadate® CD, generic Metadate® ER, generic Quillivant™ XR **QuilliChew ER™** Ritalin® LA, generic generic	 ***ER capsule:* 10 mg, 15 mg, 20 mg, 30 mg, 40 mg, 50 mg, 60 mg** ***ER capsule:* 10 mg, 20 mg, 30 mg, 40 mg, 50 mg, 60 mg** ***ER tablet:* 10 mg (generic only), 20 mg** ***ER oral suspension:* 300 mg/60 ml, 600 mg/120 ml, 750 mg/150 ml, 900 mg/180 ml** ***ER chewable tablet:* 20 mg, 30 mg, 40 mg** ***ER capsule:* 10 mg, 20 mg, 30 mg, 40 mg** ***sustained-release tablet:* 20 mg** ▪ **6-17 years of age**	 60 mg/day
Transdermal system Daytrana™	 **transdermal patch 10 mg/9h, 15 mg/9h, 20 mg/9h, 30 mg/ 9h** ▪ **6-17 years of age**	 30 mg/9 h/day
NON-STIMULANTS		
SELECTIVE NOREPINEPHRINE REUPTAKE INHIBITORS		
Atomoxetine		
Strattera®	***capsules:* 10 mg, 18 mg, 25 mg, 40 mg, 60 mg, 80 mg 100 mg** ▪ **6-17 years of age (≤ 70 kg)** ▪ **6-17 years of age (> 70 kg)**	 1.4 mg/kg/day (up to 100 mg/day) 100 mg/day
SELECTIVE ALPHA$_{2A}$-ADRENERGIC RECEPTOR AGONISTS		
Guanfacine		
Intuniv®, generic	***ER tablet:* 1 mg, 2 mg, 3 mg, 4 mg** ▪ **6-12 years of age** ▪ **13-17 years of age**	 **4 mg/day** **7 mg/day**

ER = extended-release
* Mixed amphetamine salts are a 1:1:1:1 combination of dextroamphetamine sulfate, dextroamphetamine saccharate, amphetamine aspartate monohydrate and amphetamine sulfate
+***may increase dose to 60 mg/day in children weighing > 50 kg***

2. Duration of Therapy

Attention-deficit/hyperactivity disorder (ADHD) is defined in DSM-IV as a behavioral disorder of childhood onset characterized by symptoms of inattentiveness and hyperactivity-impulsivity. While many of the approved medications improve inattention, hyperactivity, and impulsivity in up to 70-96% of patients, symptoms may persist lifelong with less pronounced hyperactivity. Therefore, treatment often lasts well into adulthood, and ADHD is considered a chronic disorder.

3. Duplicative Therapy [*]

The use of two or more psychostimulants concurrently for ADD/ADHD management is not justified. Additional therapeutic benefit is not realized when ADHD medications are used in combination.

Additionally, guanfacine extended-release tablets should not be prescribed concurrently with other guanfacine-containing products due to increased risks of additive pharmacologic/adverse effects, including hypotension. Patient profiles documenting receipt of multiple ADHD medications or multiple guanfacine-containing products will be reviewed.

4. Drug-Drug Interactions [*]

Patient profiles will be assessed to identify those drug regimens which may result in clinically significant drug-drug interactions. Drug-drug interactions considered clinically significant for ADD/ADHD medications are summarized in **Table 3**. Only those drug-drug interactions identified as clinical significance level 1 or those considered life-threatening which have not yet been classified will be reviewed:

Table 3: Drug-Drug Interactions for ADD/ADHD Medications

Target Drug	Interacting Drug	Interaction	Recommendation	Clinical Significance*
amphetamines, amphetamine-related compounds, dexmethylphenidate, methylphenidate	antihypertensive agents	combined administration decreases hypotensive effect of antihypertensive agents	closely monitor blood pressure and adjust antihypertensive therapy doses as necessary	2- major (CP)
amphetamines, amphetamine-related compounds, dexmethylphenidate, methylphenidate	monoamine oxidase inhibitors (MAOIs) and drugs with MAOI-like actions (e.g., procarbazine)	combined administration increases risk of enhanced vasopressor effects and hypertensive crisis due to increased norepinephrine availability; amphetamines, dexmethylphenidate, and methylphenidate potentiate catecholamine neurotransmitter effects, while MAOIS block catecholamine degradation and increase norepinephrine levels at nerve receptor sites	concurrent administration as well as amphetamine, dexmethylphenidate, or methylphenidate administration within 14 days of MAOI use is contraindicated	contraindicated (DrugReax) 1-severe (CP)
amphetamines, amphetamine-related compounds	phenothiazines	co-administration results in decreased effectiveness of both drug classes	avoid combination, if possible	2-major (CP) major (DrugReax)

Table 3: Drug-Drug Interactions for ADD/ADHD Medications (continued)

Target Drug	Interacting Drug	Interaction	Recommendation	Clinical Significance*
amphetamines, amphetamine-related compounds	SSRIs, SNRIs	combined administration may produce additive pharmacologic effects and increase risk of serotonin syndrome as amphetamines may stimulate serotonin release in central nervous system (CNS)	administer cautiously together and observe for signs/symptoms of serotonin syndrome; discontinue therapy and treat as necessary if serotonin syndrome develops	major (DrugReax) 2-major (CP)
amphetamines, amphetamine-related compounds	TCAs	adjunctive administration may potentiate amphetamine pharmacologic/adverse effects including hypertension, other cardiac effects, and CNS stimulation due to additive effects on norepinephrine release/activity	administer combination cautiously; observe for increased adverse effects	moderate (DrugReax) 2-major (CP)
amphetamines, amphetamine-related compounds	urinary alkalinizers	combination results in increased renal tubular absorption of amphetamines and amphetamine-related compounds, decreased urinary excretion and the potential for enhanced amphetamine therapeutic/ adverse effects	combination should be avoided	2-major (CP) moderate (DrugReax)
atomoxetine	albuterol	combined administration may produce increased heart rate, blood pressure due to unknown mechanism	administer combination cautiously; monitor blood pressure and heart rate	major (DrugReax) 3-moderate (CP)
atomoxetine	MAOIs	co-administration may result in additive serotonergic effects/increased risk of serotonin syndrome as atomoxetine inhibits serotonin reuptake and MAOIs inhibit catecholamine breakdown	concomitant administration as well as atomoxetine administration within 14 days of MAOI use contraindicated	contraindicated (DrugReax) 1-severe (CP)

Table 3: Drug-Drug Interactions for ADD/ADHD Medications (continued)				
Target Drug	**Interacting Drug**	**Interaction**	**Recommendation**	**Clinical Significance*+**
dexmethylphenidate, methylphenidate	select anticonvulsants [e.g., phenobarbital, hydantoins (e.g., phenytoin) and primidone]	adjunctive administration may increase serum anticonvulsant levels of select anticonvulsants due to unknown mechanism; dexmethylphenidate, methylphenidate may also lower seizure threshold	monitor serum anticonvulsant levels closely and monitor patients for increased adverse effects; adjust anticonvulsant doses as needed; also monitor seizure frequency	moderate (DrugReax) 2-major, 3-moderate (CP)
dexmethylphenidate, methylphenidate	warfarin	co-administration may increase warfarin serum levels and enhance pharmacologic/adverse effects, including bleeding	closely monitor INR with combined therapy and adjust warfarin doses as necessary	moderate (DrugReax) 3-moderate (CP)
guanfacine	antihypertensive agents	combined administration may result in additive hypotensive effects	closely monitor blood pressure and adjust doses as necessary	3-moderate (CP)
guanfacine	CNS depressants	combined administration may result in additive pharmacologic (sedative) effects	administer cautiously together	3-moderate (CP)
guanfacine	strong CYP3A4 inhibitors (e.g., ketoconazole)	adjunctive administration may result in increased guanfacine concentrations and the potential for enhanced pharmacologic/adverse effects as guanfacine is metabolized by CYP3A4	administer cautiously together and monitor for increased pharmacologic effects (e.g., hypotension, bradycardia, sedation)	unknown
guanfacine	CYP3A4 inducers (e.g., rifampin, phenytoin)	concurrent administration reduces guanfacine AUC by 70% and may result in decreased guanfacine serum levels and reduced pharmacologic/clinical effects (guanfacine metabolized by CYP3A4)	monitor for loss of guanfacine clinical effects; increased guanfacine doses may be necessary	3-moderate (CP)

Table 3: Drug-Drug Interactions for ADD/ADHD Medications (continued)				
Target Drug	**Interacting Drug**	**Interaction**	**Recommendation**	**Clinical Significance***
guanfacine	valproic acid (VA)	combined administration may result in increased VA serum levels, potentially due to competition for glucuronidation metabolic pathway	monitor for additive CNS effects; VA dosage adjustments may be required	unknown
methylphenidate	bupropion	concurrent use may result in increased seizure risk	if combination is necessary, closely monitor patient	major (DrugReax) 2-major (CP)
methylphenidate	carbamazepine	co-administration may result in reduced methylphenidate serum levels and decreased pharmacologic effects due to unknown mechanism; methylphenidate may also lower seizure threshold	closely monitor patient response to methylphenidate therapy, monitor seizure frequency, and adjust methylphenidate doses as necessary with this drug combination	moderate (DrugReax) 2-major (CP)

**CP = Clinical Pharmacology*

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